

SPECIFICATIONS

	CAS 3.1	CAS 2.1
Woofer:	9" C.M.M.D.	7-1/2" C.M.M.D.
Midrange:	3-1/2" C.M.M.D.	—
Tweeter:	1" C.M.M.D.	1" C.M.M.D.
System Frequency Response: (+3dB)	32Hz*–22,000Hz	40Hz*–22,000Hz
Sensitivity: (2.83V @ 1 meter)	90dB	90dB
Recommended Amplifier Power Range:	15 – 200 Watts	15 – 150 Watts
Nominal Impedance:	8 Ohms	8 Ohms
Crossover Frequency(ies):	400Hz, 2,800Hz; 24dB/octave	2,800Hz; 24dB/octave
Dimensions:		
Outer (including grille) (H x W x D)	22-1/8" x 14-7/8" x 3-1/2"*** (562mm x 378mm x 89mm)	17-7/8" x 13" x 3-1/2"*** (454mm x 330mm x 89mm)
Wall Cutout (H x W)	19-1/8" x 12-1/2" (486mm x 318mm)	14-7/8" x 10-1/2" (378mm x 267mm)
Weight: (including frame, speaker and grille)	11 lb (5kg)	15 lb (6.8kg)

*Depending upon enclosure volume. See "Enclosure Information," at right, for detailed information.

**Depth excludes grille.

THIELE/SMALL PARAMETERS

	CAS 3.1	CAS 2.1
Total Q (Q_{TS})	0.71	0.72
Compliance Volume (V_{AS})	72.3 liters	43.1 liters
Free-Air Resonance (F_S)	34.8Hz	40Hz
Mechanical Q (Q_{MS})	11.46	11.27
Electrical Q (Q_{ES})	0.76	0.77
Voice-Coil DC Resistance (R_E)	4.06 ohms	4.05 ohms
Moving Mass, Air Load (M_{MS})	34.79 grams	23.10 grams
Suspension Compliance (C_{MD})	601um/N	671um/N
Motor Force Factor (BL)	6.39 Tesla-M	5.56 Tesla-M
Driver Radiating Area (S_D)	0.0293m ²	0.0214m ²

ENCLOSURE INFORMATION

The internal volume of an enclosure is directly related to the amount of low-frequency extension and output that can be accurately reproduced by a loudspeaker. The CAS in-wall loudspeakers were designed to use the typical wall cavity dimensions of 8' x 14-1/2" x 3-1/2" for maximum low-frequency extension. However, due to varying construction standards, materials and applications, it is sometimes beneficial to create a dedicated enclosure for the speakers. The charts below show the internal volumes of sample enclosures and the resulting –3dB points for each model.

Internal Volume	CAS 3.1 –3dB Frequency	CAS 2.1 –3dB Frequency
2.7 cu. ft.	32Hz	40Hz
1.35 cu. ft.	38Hz	45Hz

It is important that the enclosures be well-constructed – MDF is recommended. The enclosure should be securely mounted to the adjacent wall studs. In addition, the enclosure should be filled with fiberglass insulation so that the enclosure is full, but the insulation is not compressed.



CAS 3.1



CAS 2.1



TECHNOLOGY • PERFORMANCE • DESIGN

■ A Harman International Company

250 Crossways Park Drive, Woodbury, NY 11797 USA • (800) 553-3332 • Fax (516) 682-3523 • www.infinitysystems.com • PART NO.: CASWHT